

WO 2004/043999

PCT/CA2003/001716

## SEQUENCE LISTING

&lt;110&gt; Xenon Genetics Inc.

<120> HSAN II Related Gene and Expression Products  
and Uses Thereof

&lt;130&gt; 760050-110

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&lt;150&gt; US/60/425,601

&lt;151&gt; 2002-11-12

&lt;150&gt; US/60/502,453

&lt;151&gt; 2003-09-12

&lt;160&gt; 33

&lt;170&gt; PatentIn version 3.0

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&lt;211&gt; 2786

&lt;212&gt; DNA

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Asp Tyr Arg Pro Gly Leu Val Leu Ala Glu Glu Ala His Tyr Phe Ile
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Pro Met Lys Gln Ile Ser Glu Gln Lys Pro Val Pro Gly Gly Pro Ala
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Pro Pro Lys Ala Tyr Asn Asn Gln Arg Arg Lys Ser Thr Ser Ile Leu  
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<211> 2786

<212> DNA

<213> Homo sapiens

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 Ala Val Val Met Leu Gly Thr Thr Ala Ser Arg Val Thr Gly Glu Pro  
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 Cys Glu Ile Gln Val Gln Pro Leu Phe Glu Pro Thr Gln Val Tyr Gly  
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 225 230 235 240  
 Phe His Pro Val Phe Val Pro His Ser Ala Pro Ala Val Leu Thr His  
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Thr Ser Ser Ser Val Phe Glu Phe Pro Ser Gly Gln Ala Phe Leu Val

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 Lys Phe His Pro Val Phe Val Pro His Ser Ala Pro Ala Val Leu Thr  
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 His Asn Asn Glu Ser Arg Ser Asn Cys Val Phe Glu Phe His Val His  
 245 250 255  
 Thr Pro Ser Ser Ser Ser Gly Glu Gly Gly Gly Ile Leu Pro Gln Arg  
 260 265 270  
 Val Tyr Arg Asn Arg Gln Val Ala Val Asp Leu Asn Gln Glu Glu Leu  
 275 280 285  
 Pro Pro Gln Ser Val Gly Leu His Gly Tyr Leu Gln Pro Val Thr Glu  
 290 295 300  
 Glu Lys His Asn Tyr His Ala Pro Glu Leu Thr Val Ser Val Val Glu  
 305 310 315 320  
 Pro Ile Gly Gln Asn Trp Pro Ile Gly Ser Pro Glu Tyr Ser Ser Asp  
 325 330 335  
 Ser Ser Gln Ile Thr Ser Ser Asp Pro Ser Asp Phe Gln Ser Pro Pro  
 340 345 350  
 Pro Thr Gly Gly Ala Ala Ala Pro Phe Gly Ser Asp Val Ser Met Pro  
 355 360 365  
 Phe Ile His Leu Pro Gln Thr Val Leu Gln Glu Ser Pro Leu Phe Phe  
 370 375 380  
 Cys Phe Pro Gln Gly Thr Thr Ser Gln Gln Val Leu Thr Ala Ser Phe  
 385 390 395 400  
 Ser Ser Gly Gly Ser Ala Leu His Pro Gln Val Ile Gly Lys Leu Pro  
 405 410 415  
 Gln Leu Phe

<210> 21  
 <211> 425  
 <212> PRT  
 <213> Mus musculus

<400> 21  
 Met Leu Ile Gln Pro Gln Ser Met Ala His Pro Cys Gly Gly Thr Pro  
 1 5 10 15  
 Thr Tyr Pro Glu Ser Gln Ile Phe Phe Pro Thr Ile His Glu Arg Pro  
 20 25 30  
 Val Ser Phe Ser Pro Pro Pro Thr Cys Pro Pro Lys Val Ala Ile Ser



Ser Asp Val Ser Leu Pro Phe Ile Arg Leu Pro Gln Thr Val Leu Gln  
 370 375 380

Glu Ser Pro Leu Phe Phe Cys Phe Pro Gln Gly Thr Thr Ser Gln Gln  
 385 390 395 400

Val Leu Ser Ala Ser Tyr Ser Ser Gly Gly Ser Thr Leu His Pro Gln  
 405 410 415

Val Ile Gly Lys Leu Ser Gln Phe Phe  
 420 425

<210> 22  
 <211> 418  
 <212> PRT  
 <213> Mus musculus

<400> 22  
 Met Ala His Pro Cys Gly Gly Thr Pro Thr Tyr Pro Glu Ser Gln Ile  
 1 5 10 15

Phe Phe Pro Thr Ile His Glu Arg Pro Val Ser Phe Ser Pro Pro Pro  
 20 25 30

Thr Cys Pro Pro Lys Val Ala Ile Ser Gln Arg Arg Lys Ser Thr Ser  
 35 40 45

Phe Leu Glu Ala Gln Thr Arg His Phe Gln Pro Leu Leu Arg Thr Val  
 50 55 60

Gly Gln Asn His Leu Pro Pro Gly Ser Ser Pro Thr Asn Trp Thr Pro  
 65 70 75 80

Glu Ala Ile Val Met Leu Gly Ala Thr Ala Asn Arg Val Asn Arg Glu  
 85 90 95

Leu Cys Glu Met Gln Val Gln Pro Val Phe Glu Pro Thr Gln Ile Tyr  
 100 105 110

Ser Asp Tyr Arg Pro Gly Leu Val Leu Ala Glu Glu Ala His Tyr Phe  
 115 120 125

Ile Pro Gln Glu Thr Val Tyr Leu Ala Gly Val His Tyr Gln Ala Gln  
 130 135 140

Val Ala Gly Gln Tyr Glu Gly Ile Ser Tyr Asn Ser Pro Val Leu Ser  
 145 150 155 160

Ser Pro Met Lys Gln Ile Ser Glu Gln Lys Pro Val Pro Gly Gly Pro  
 165 170 175

Ala Ser Ser Ser Val Phe Glu Phe Pro Ser Gly Gln Ala Phe Leu Val  
 180 185 190

Gly His Leu Gln Asn Leu Arg Leu Asp Ser Gly Pro Ser Pro Ala Ser  
 195 200 205

Pro Leu Ser Ser Ile Ser Ala Pro Asn Ser Thr Asp Ala Thr His Leu

210                      215                      220  
 Lys Phe His Pro Val Phe Val Pro His Ser Ala Pro Ala Val Leu Thr  
 225                      230                      235                      240  
 Asn Ser Asn Glu Asn Arg Ser Asn Cys Val Phe Glu Phe His Ala Gln  
                     245                      250                      255  
 Thr Pro Ser Ser Ser Gly Glu Gly Gly Gly Ile Leu Pro Gln Arg Val  
                     260                      265                      270  
 Tyr Arg Asn Arg Gln Val Ala Val Asp Ser Asn Gln Glu Glu Leu Ser  
                     275                      280                      285  
 Pro Gln Ser Val Gly Leu His Cys His Leu Gln Pro Val Thr Glu Glu  
                     290                      295                      300  
 Gln Arg Asn Asn His Ala Pro Glu Leu Thr Ile Ser Val Val Glu Pro  
 305                      310                      315                      320  
 Met Gly Gln Ile Trp Pro Ile Gly Ser Pro Glu Tyr Ser Ser Asp Ser  
                     325                      330                      335  
 Ser Gln Ile Thr Ser Ser Asp Leu Ser Asp Phe Gln Ser Pro Pro Pro  
                     340                      345                      350  
 Thr Gly Gly Thr Ala Ala Pro Phe Gly Ser Asp Val Ser Leu Pro Phe  
                     355                      360                      365  
 Ile Arg Leu Pro Gln Thr Val Leu Gln Glu Ser Pro Leu Phe Phe Cys  
                     370                      375                      380  
 Phe Pro Gln Gly Thr Thr Ser Gln Gln Val Leu Ser Ala Ser Tyr Ser  
 385                      390                      395                      400  
 Ser Gly Gly Ser Thr Leu His Pro Gln Val Ile Gly Lys Leu Ser Gln  
                     405                      410                      415  
 Phe Phe

<210> 23  
 <211> 426  
 <212> PRT  
 <213> Ratus ratus

<400> 23  
 Met Leu Ile Gln Pro Gln Ser Val Ala His Pro Cys Gly Gly Thr Pro  
 1                      5                      10                      15  
 Thr Tyr Pro Glu Ser Gln Ile Phe Phe Pro Thr Ile His Glu Arg Pro  
                     20                      25                      30  
 Val Ser Phe Ser Pro Pro Pro Thr Cys Pro Pro Lys Val Ala Ile Ser  
                     35                      40                      45  
 Gln Arg Arg Lys Ser Thr Ser Phe Leu Glu Ala Gln Thr Arg His Phe  
 50                      55                      60  
 Gln Pro Leu Leu Arg Thr Val Gly Gln Asn His Leu Pro Pro Gly Gly

65	70	75	80
Ser Pro Thr Asn Trp Thr Pro Glu Ala Ile Val Met Leu Gly Thr Thr	85	90	95
Ala Asn Arg Val Asn Arg Glu Leu Cys Glu Met Gln Val Gln Pro Val	100	105	110
Phe Glu Thr Thr Gln Ile Tyr Ser Asp Tyr Arg Pro Gly Leu Val Leu	115	120	125
Ala Glu Glu Ala His Tyr Phe Ile Pro Gln Glu Thr Val Tyr Leu Ala	130	135	140
Gly Val His Tyr Gln Ala His Ala Ala Gly Gln Tyr Glu Gly Ile Ser	145	150	155
Tyr Asn Ser Pro Val Leu Ser Ser Pro Met Lys Gln Ile Thr Glu Gln	165	170	175
Lys Pro Val Pro Gly Cys Pro Ala Ser Ser Ser Val Phe Glu Phe Pro	180	185	190
Ser Gly Gln Ala Phe Leu Val Gly His Leu Gln Asn Leu Arg Leu Asp	195	200	205
Ser Gly Pro Ser Pro Ala Ser Pro Leu Ser Ser Ile Ser Ala Pro Asn	210	215	220
Ser Thr Asp Ala Thr His Leu Lys Phe His Pro Val Phe Val Pro His	225	230	235
Ser Ala Pro Ala Val Leu Thr His Ser Asn Glu Asn Arg Ser Asn Cys	245	250	255
Val Phe Glu Phe His Ala Gln Thr Pro Ser Ser Ser Ser Gly Glu Gly	260	265	270
Gly Gly Ile Leu Pro Gln Arg Val Tyr Arg Asn Arg Gln Val Ala Val	275	280	285
Asp Ser Ser Gln Glu Glu Leu Ser Pro Gln Ser Val Gly Leu His Cys	290	295	300
His Leu Gln Pro Val Thr Glu Glu Gln Arg Asn Asn His Thr Pro Glu	305	310	315
Leu Thr Ile Ser Val Val Glu Pro Met Gly Gln Asn Trp Pro Val Gly	325	330	335
Ser Pro Glu Tyr Ser Ser Asp Ser Ser Gln Ile Thr Ser Ser Asp Ile	340	345	350
Ser Asp Phe Gln Ser Pro Pro Pro Thr Gly Gly Thr Ala Ala Pro Phe	355	360	365
Gly Ser Asp Val Ser Leu Pro Tyr Ile Arg Leu Pro Gln Thr Val Leu	370	375	380
Gln Glu Ser Pro Leu Phe Phe Cys Phe Pro Gln Gly Thr Thr Ser Gln	385	390	395
			400

Gln Val Leu Ser Ala Ser Tyr Ser Ser Gly Gly Ser Ala Leu His Pro  
405 410 415

Gln Val Ile Gly Lys Leu Ser Gln Phe Phe  
420 425

<210>	24
<211>	24
<212>	DNA
<213>	Artificial

<220>  
<223> Forward amplification Primer

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<400> 24
ttccagaagc attgttattt attt 24
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<210>	25
<211>	19
<212>	DNA
<213>	Artificial

<220>  
<223> Reverse Replication Primer

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<400> 25
ccccottgta ctggcttct 19
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<210>	26
<211>	23
<212>	DNA
<213>	Artificial

<220>  
<223> Forward Replication Primer

<400> 26  
caccagaggc cgtagttatg ttg 23

<210>	27
<211>	24
<212>	DNA
<213>	Artificial

<220>  
<223> Reverse replication primer.

<400> 27  
ttgaggagggc agttcttctt gatt 24

<210>	28
<211>	23
<212>	DNA
<213>	Artificial



<220>  
<223> Forward replication primer.

<400> 28  
gcgcctgctg tgttaactca taa 23

<210> 29  
<211> 24  
<212> DNA  
<213> Artificial

<220>  
<223> Reverse replication primer.

<400> 29  
ccaaagatgg ggaaactcta ctga 24

<210> 30  
<211> 23  
<212> DNA  
<213> Artificial

<220>  
<223> Forward replication primer.

<400> 30  
accatcacct aaggagacag acc 23

<210> 31  
<211> 22  
<212> DNA  
<213> Artificial

<220>  
<223> Reverse replication primer.

<400> 31  
tgcaacaaat gtaccactct gg 22

<210> 32  
<211> 16  
<212> DNA  
<213> Artificial

<220>  
<223> Forward replication primer.

<400> 32  
agctcctaaa tccccg 16

<210> 33  
<211> 21  
<212> DNA  
<213> Artificial

<220>

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<223> Reverse replication primer.

<400> 33

gccatgtcta taaataccct g

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